

## CLAIMS

1. A method for manufacturing an optical waveguide chip having an optical waveguide and an optical fiber guide portion for positioning an optical fiber to be connected with the optical waveguide, which comprises the following steps (A) and (B):

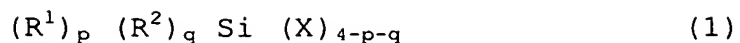
(A) a step for forming an optical waveguide using a radiation-sensitive polysiloxane composition; and

(B) a step for forming an optical fiber guide portion using the same or a different radiation-sensitive composition as/from the material of the optical waveguide.

2. The method for manufacturing an optical waveguide chip according to claim 1, which comprises (C) a step for fixing a cover member on the upper surface of the optical waveguide formed by the step (A).

3. The method for manufacturing an optical waveguide chip according to claim 1 or 2, wherein the radiation-sensitive polysiloxane composition comprises the following components (a) and (b), and has a silanol (Si-OH) group content of from 10 to 50 percent based on the total bonds on Si:

(a) at least one type of compound selected from the group consisting of hydrolysates of hydrolyzable silane compounds represented by the following general formula (1) and condensation products of said hydrolysates,



[In the formula,  $R^1$  is a non-hydrolyzable organic group having 1 to 12 carbon atoms and at least one fluorine atoms;  $R^2$  is a non-hydrolyzable organic group having 1 to 12 carbon atoms (excepting a group having a fluorine atom); X is a hydrolyzable group; p is 1 or 2; q is 0 or 1.]; and

(b) a photo-acid generator.